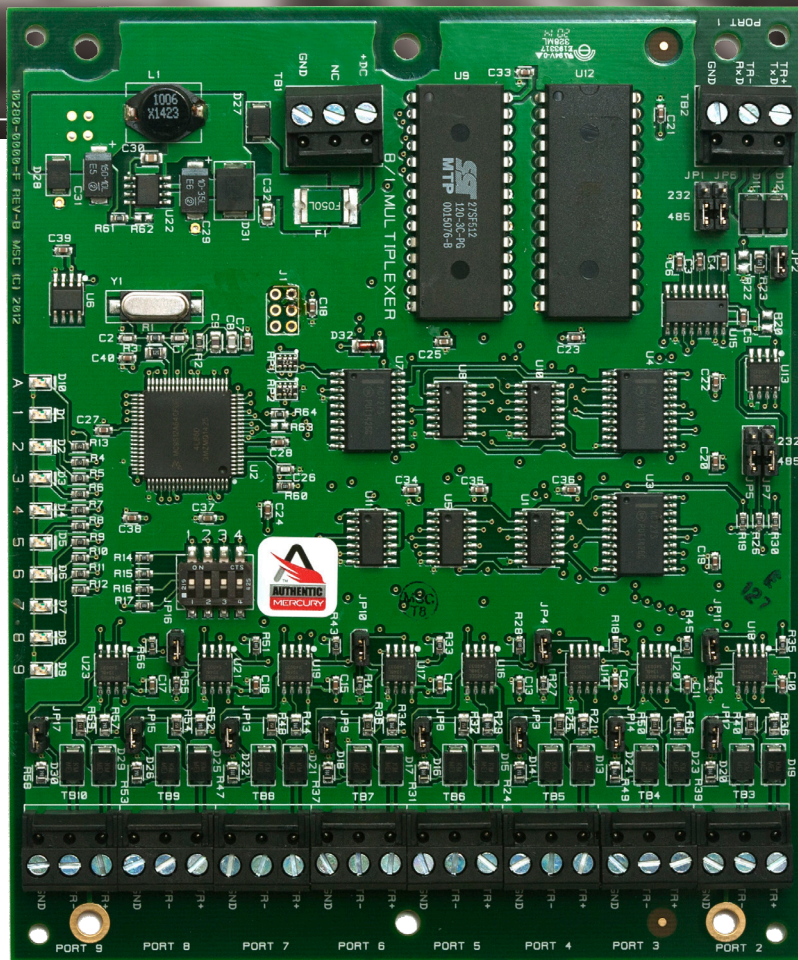# MUX-8

MUX-8 Multiplexer

The RS2 MUX-8 is an eight-port RS-485 multiplexer that takes an RS-485 or RS-232 input and multiplexes eight 2-wire RS-485 communication channels. The MUX-8 utilizes bus-arbitration logic on a first-come, first-serve basis and can detect and deactivate a broken channel to protect the integrity of the communications bus. It offers the added flexibility of expanding a single data line into multiple data lines, thus providing numerous installation configuration options and giving system designers and installers the ability to manage complex, divergent installations.

Common uses of the MUX-8 are for star topology wiring schemes, home run wiring, or when wiring distances exceed the 4000-foot limit of the RS-485 standard. The MUX-8 provides an ability to be flexible in system design and layout. Using the MUX-8 an installer can implement alternate network topologies unavailable using a standard RS-485 configuration.

The MUX-8 is an 8-port multiplexer that can multiplex eight 2-wire RS-485 communication channels

The MUX-8 includes these features:

- 12 VDC operation
- Accepts RS-232 and RS-485 inputs
- Multiplexes single data line into up to 8 data lines
- Universal I/O device characterization
- Automatic fault port partitioning
- Diagnostic LEDs for each port
- Helps guard against ground loop installation issues
- Supports a star network topology
- No system programming required for configuration
- Allows for RS-485 runs longer than 4,000'
- Perfect for retrofit installations
- UL,CE, RoHS

RS2 Technologies has constructed an integrated family of access management software and hardware that can be configured to provide a cost-effective solution for very small to very large systems. The LP series of hardware relies on open architecture to maximize freedom for users, control costs, and allow for interoperability via integration to provide the most complete solution from a platform trusted worldwide.

MUX-8

Technical Specifications

Power	
Primary Power	12 to 24 Vdc +/- 15%
	350 mA maximum

Panel Specifications	
RS-485 Busses	1 RS-485 IN (Port 1)
	8 RS-485 OUT (Ports 2-9)
Outputs	2 Auxiliary Form-C Contact 2 A @ 30 Vdc, resistive
	NC 3 A @ 30 Vdc, resistive
	NO 5 A @ 30 Vdc, resistive
Standards	UL 294, CE, RoHS

Technical Specifications

Cabling	
Power & Relays	1 Twisted Pair - 18 AWG
SIO RS-485	1 Twisted Pair with Drain Wire and Shield, 120 Ohm Impedance, 24 AWG, 4,000 Foot Maximum

Physical Specifications	
Dimensions	5.0 in. (127 mm) W x 6.0 in. (52 mm) L x 1.0 in. (25 mm)
Humidity	5 to 95% RHNC
Temperature	-55 to +85 °C Storage
	0 to +70 °C Operating
Weight	5.4 oz